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ECONOMIC OBJECTIVES OF FARMERS' COOPERATIVES

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COOPERATIVE RESEARCH AND SERVICE DIVISION

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FOREWORD

This analysis of the objectives of farmers' marketing associations is purposely brief and general, rather than extensive and specific. More refined analysis of the objectives of individual cooperatives and the degree to which they have been attained is desirable. It is hoped that this treatise will stimulate projects of such nature and be useful in planning them. The author also hopes that this report will be helpful to those who wish to understand cooperatives and to learn how they fit into the American economy and the American way of life.

ECONOMIC OBJECTIVES OF FARMERS' COOPERATIVES

By
E. A. Stokdyk
President, Berkeley Bank for Cooperatives

COOPERATIVES AND THEIR PLACE IN THE AMERICAN ECONOMY

Americans have traditionally resisted monopolies. Nevertheless, technological development, mass production, and improved transportation and communication have favored their formation and growth.

Three principal methods have been employed to curb them: (1) legislation and regulation; (2) State ownership and operation; and (3) cooperative competition. The antitrust laws were enacted in the early stages of our industrial history; likewise, laws regulating public utilities were soon formulated. State, Federal, or municipal ownership has been undertaken in some situations. At the same time cooperative competition grew out of many individual and separate situations where monopolies, sometimes small in scope but nevertheless real, exacted too large a return for the services rendered.

Cooperative competition has been one of the most effective tools employed to curb monopolies. Public policy has supported cooperative activity, particularly among farmers, for more than half a century. Associations of farmers to conduct their own business activities have been fostered and encouraged by Federal and State statutes and agencies. Their services have been so outstanding that they are attracting considerable attention. In some quarters, partly because of their influence in this regard, cooperatives are regarded as in conflict with the American system of "free enterprise."

Students of the cooperative movement point out that, although the cooperative operates on a nonprofit basis, the profit motive is behind the enterprise. As in a partnership, members establish cooperatives as a means of increasing the profits from their farm operations. Thus, cooperative business is a rival and partner of commercial business in the American system of free enterprise.

The aims and purposes of cooperatives are primarily economic. To understand and appraise them, however, a knowledge of their specific economic objectives is essential. Some are simple and easily understood, others are complex and only apparent after a careful analysis of price theory.

The purpose of this discussion is to present and analyze the economic objectives of farmers' cooperatives and the means by which they are attained. The possibilities and limitations involved are mentioned, but the reader is asked to make his own appraisal of this phase of cooperative undertakings.

THEORY OF MARKET PRICES

To understand how farmers' cooperatives attempt to influence prices and accomplish their other economic objectives, one must have a concept of how market prices are established.

If a layman is asked what factors establish market prices, he simply states: "Supply and demand." But if he is asked to explain "supply" and "demand" he usually mentions inventories or available stocks as "supply" and consumers' buying power as "demand." In reality, he has named only a few of many factors which influence buyers and sellers in bidding and offering when they are in the market.

FACTORS INFLUENCING BUYERS AND SELLERS

Below, in the outline of the functioning of supply and demand, there are listed a number of factors which influence buyers and sellers in making their bids and offers. The list is not arranged in order of importance. At times a specific factor may be dominant and at other times of little moment. For example, at harvest time costs of production may be uppermost in a farmer's mind in deciding whether to sell or to hold his stocks; whereas, at some later date, his estimate of future price trends may be the dominant factor.

Outline of the Functioning of Supply
and Demand in Wholesale Markets

Factors influencing SELLERS in offering		Factors influencing BUYERS in bidding
1. Total stocks and knowledge of them	MARKET SETTING	1. Total stocks and knowledge of them
2. Availability of total stocks		2. Availability of total stocks
3. Inventories of prospective sellers	Bargaining	3. Inventories of prospective buyers
4. Keeping quality of stocks		4. Ability to dispose of stocks
5. Estimate of future price trends		5. Estimate of future price trends
6. Offers of other sellers	- Price -	6. Bids of other buyers
7. Storage charges and shrinkage		7. Handling costs and margins
8. Pressure or lack of pressure from financial backers	Bargaining	8. Ability to obtain capital
		9. Knowledge of consumers' needs and purchasing power
9. Cost of stocks		
10. Stocks and prices of substitute products	MARKET SETTING	10. Stocks and prices of substitute products

A detailed discussion of the factors listed, as well as others, would be interesting and profitable, but for the purpose of this discussion would carry us too far afield. Here the important point is that prices are established by buyers and sellers whose actions in the market are influenced by their estimates and judgments of many physical and economic factors. People, not the factors, make the bids and offers. It is people whose buying and selling make market prices.

One factor, however, believed to be worthy of closer analysis is "estimate of future price trends" because every buyer and seller attempts to predict prices unless he already has an order or contract at a fixed price. Only under unusual circumstances would a buyer or seller knowingly enter into a transaction which promises a loss or precludes a gain. A trader will invariably say: "I have no idea what the market is going to do." Yet at the same time he has a feeling, a premonition, or a tentative estimate. He must have, or he would withdraw from the market.

All values lie in the future. People buy things to use or to resell the next minute, the next hour, the next month, or the next year. Every transaction, then, is based upon the future; hence, every buyer and seller is judging the future. Consequently, all the factors listed among those which influence buyers and sellers in making their bids and offers influence them in estimating future price trends.

Because money serves as a commodity held for resale, some persons believe that money and the forces which influence the supply of and the demand for money exert a marked influence on buyers and sellers in making their estimates of future price trends. Usually these same persons believe that, through monetary controls, buyers and sellers can be so influenced as to force the trend of prices in a given direction.

Some buyers and sellers analyze monetary factors in making their estimates of future price trends; others pay little or no attention to them. Among those who follow the monetary factors there is a wide difference of opinion respecting their importance. Consequently, it is most difficult to state, even at the time when monetary controls are being executed, how much weight should be attached to the controls as factors influencing buyers and sellers.

MARKET SETTING

Buyers and sellers operate in various types of market settings. Some commodities are sold in highly competitive markets while others are sold under semimonopolistic conditions. The former are characterized by numerous bids and offers by numerous buyers and sellers, while the latter are distinguished by the bids and offers of a few dominant buyers or a few dominant sellers. Sellers soon learn that there is little to be gained by offering to sell in a monopolistic type of market if the few effective buyers are not in the market. Contrariwise, buyers seldom bid for products when the sellers are few in number but await the established prices and then determine how much they will take at such prices.

The trading in some commodities is conducted on exchanges where all buyers and sellers are aware immediately of the bids and offers of other buyers and sellers. This market setting presents quite a contrast to that where buyers and sellers operate independently and rely upon rumors, delayed reports, or the estimates of their sales staff.

Some commodities are sold in some markets at auction, and in other markets at private sale. The seller and some buyers are then confronted with two types of market settings. Prices established in the two may be the same or they may differ at any given time although established by some of the same market forces.

The terms and conditions of trading vary in different types of markets. The terms and conditions are also a part of the market setting. If sales are for cash rather than on credit, bids and offers are likely to reflect this situation. The legal background of markets is also a part of the market setting. So are the customs and traditions. The students of markets will find much litigation and many court decisions affecting market settings.

We need not explore here the numerous types of market settings. It is sufficient to point out that all trading takes place in some one of them. If no radical changes take place in the setting, buyers and sellers become accustomed to it, but if marked changes are made in the setting the changes exert an influence on the bids and offers of buyers and sellers. For example, if an announcement were made that the grain exchanges were to be closed, both buyers and sellers would revise their bids and offers in accordance with their judgment as to how such action might affect their ability to liquidate or acquire stocks.

BARGAINING

When buyers and sellers make bids and offers in a given market setting there is usually a period of bargaining. On organized exchanges the period of time may be only a fraction of a second. On the other hand, weeks or months may elapse in some markets before a bargain is reached. At times sellers may be in a strong bargaining position, while on other occasions buyers hold the advantage. Bargaining power and bargaining ability have long been recognized as important in establishing prices. This point is discussed more fully on pages 18 to 21.

VOLUME AND PRICE RELATIONSHIPS

The prices established by the reactions of buyers and sellers to various volumes of an agricultural commodity under given general economic conditions are frequently such that the economist can calculate a volume-price curve. Such a curve is frequently used to represent the demand for the commodity which is the number of units that would be taken at various prices.

In analyzing the price objectives of cooperatives, hypothetical curves will be used. Figure 1 shows the volume-price relationship for avocados in a wholesale market in 1930-31 as developed by the author.[1]

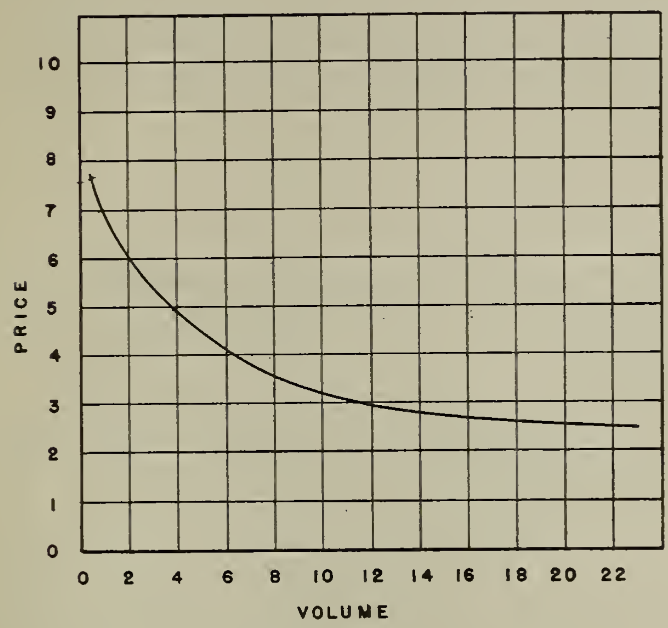

Figure 1. - Volume-price relationship for avocados, in a wholesale market, 1930-31.

The sloping curve shows one of the most fundamental principles of price theory; namely, that as the volume of a given commodity offered for sale increases, prices decline. The economist explains this by pointing out that as consumers receive increased quantities of a commodity, the utility or usefulness to them of additional amounts of the commodity decreases. Consumers will purchase as long as the utility of the last unit of the commodity is equal to the utility of any other unit or competing commodity which can be obtained for that price. Furthermore, the purchasing power of various individuals varies widely; hence, to move an increased volume, it is necessary to lower prices to induce those with lower incomes to buy. The actions of buyers and sellers all along the line from producer to consumer are influenced by these principles.

Some readers will ask how costs of production affect the volume-price curve. In the short run, costs of production are only one of the factors influencing the judgment of sellers in determining at what price they will offer their stocks. If the commodity in question is highly perishable and must be sold or allowed to spoil, costs of production exert little influence on sellers' offers. Buyers seldom are interested in costs of production. The reader, for example, knows little and cares less about the cost of producing shoes. If the commodity in question is a durable one, some sellers will withdraw from the market unless they can get enough to cover costs, confident that prices must shortly rise.

In the long run, therefore, market prices of both perishable and durable goods must be high enough to induce producers to bring forth a sufficient volume to satisfy the usual demand of consumers. In using the term <u>usual demand</u>, however, we must recognize that it is used here only in a practical sense because technically demand is variable and not fixed.

ECONOMIC OBJECTIVES

The economic objectives of farmers' cooperatives are usually stated in broad terms. They are related to prices paid and received, quality

[1]Stokdyk, E. A. Sales methods and policies of the Calabo Growers of California. Calif. Agr. Expt. Sta. bul. 539, 52 pp. 1932.

of goods purchased, and quality of services rendered. According to Jessness -

> Better prices may be obtained by the employment of better and more economical methods of marketing; by bringing about more effective distribution; by more careful grading, standardization, and other quality-improving efforts; by demand stimulation through advertising and dealers' service, and by bargaining to obtain the full market value.[2]

Nourse declares that -

> The real objective to be sought by a national livestock marketing agency is the establishment of a condition of perfect competition throughout the whole livestock market.[3]

Usually, however, some phase of the influencing of prices paid or received is emphasized in cooperative undertakings.

Says Benedict -

> So far as the producer of wool is concerned, we can see three things which he wishes to bring about: (1) higher (marketing) prices; (2) a more accurate reflection of quality differences in price differences; (3) a more stable price both within the year and from year to year.[4]

The stated objective of most cooperatives is to perform a given service or function at cost in order to increase the returns or profits of its members. Often the rendering of a more complete or satisfactory service is involved. In the case of a purchasing association the furnishing of a higher quality product is often considered. These objectives are, however, phases of the objective of obtaining a specific service or services at cost.

NARROWING THE SPREAD BETWEEN TERMINAL MARKET PRICES AND RETURNS TO FARMERS

The volume-price relationships which exist in a wholesale market are sooner or later reflected in producing areas. Therefore, local prices for agricultural products tend to follow terminal market prices at a gross margin or a differential large enough to cover costs, risks, and profits of the local handlers. See figure 2.[5] Where effective competition

[2]Jessness, O. B. Prices and the volume of production. American Cooperation, 1925, vol. 1, p. 503.

[3]Nourse, E. G. An evaluation of the livestock marketing work of the Federal Farm Board. Amer. Coop., 1931, vol. 2, p. 16.

[4]Benedict, M. R. An evaluation of the cooperative wool program. Amer. Coop., 1931, vol. 2, p. 267.

[5]See also: Shepherd, G. The burden of increased costs of distribution. Journal of Farm Economics, vol. 14, No. 4, pp. 650-661, October 1932.

is lacking, the gross margin usually includes a larger rate of profit for the handler. Lacking effective competition, there is a tendency on the part of dealers to widen the gross margin. Frequently doing so invites other dealers to engage in the same business, with the result that each dealer operates with a small volume and high costs. Thus, the rate of profit is again reduced. However, the net effect is a high charge for a service that could be rendered at a lower cost if the volume were concentrated in fewer hands.

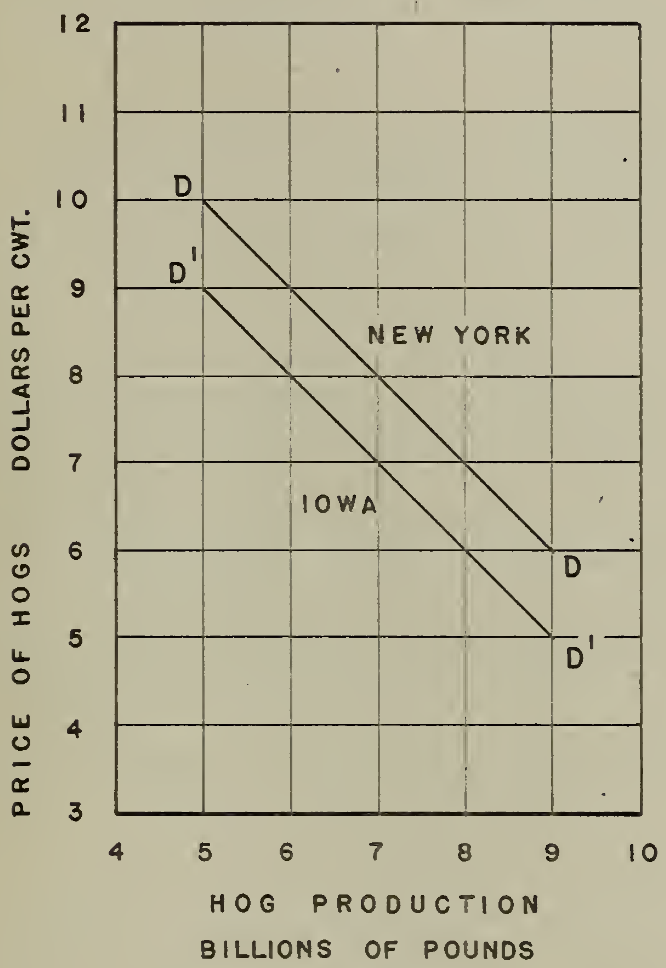

Figure 2. - Demand curves for hogs in New York and Iowa.

Probably 90 percent of farmers' marketing cooperatives have or have had as their major economic objective the reduction of the margin between terminal market prices and the net returns to farmers including patronage refunds. Farmers' purchasing cooperatives have had a similar objective - namely, the narrowing of the spread between the cost of farm supplies at wholesale and the net cost to farmers of supplies at retail.

The fact that a cooperative organizes and begins operations is frequently sufficient to attain the objective of narrowing the gross spread between terminal market and local market prices. As a matter of fact, the spread may be purposely lowered by competitors to destroy the cooperative before it gets well under way. On the other hand, instances are known where the threat of organization of a cooperative has induced proprietary concerns to narrow the spread either informally or by contract.

The cooperative, however, which relies solely on the fact of organization or a cooperative which actually operates but not in accordance with economic and business principles, is usually not effective in narrowing the net spread between terminal market prices and returns to farmers. In fact, the association may increase the gross spread by further dividing the volume within an area among the handlers.

Consequently, it is essential that the cooperative obtain a sufficient volume to operate efficiently. It is also essential that skilled management be employed. Modern machinery and equipment should be utilized. However, commercial experimentation with new processes or methods, until they are definitely beyond the laboratory stage, should be avoided. In short, the numerous factors which make for success or failure in any

business enterprise must be carefully studied and those methods and procedures adopted which have proven successful.[6]

MAINTAINING A REASONABLE GROSS SPREAD BETWEEN TERMINAL MARKET AND LOCAL MARKET PRICES

After a cooperative becomes well established and has accomplished the objective of narrowing the net spread between terminal market prices and returns to farmers, the primary economic objective frequently becomes that of maintaining a reasonable gross spread between terminal market and local prices. In a review of the activities of the Eastern States Farmers' Exchange, Reynolds states:

> The old line dealers gradually found that their best customers, the cash buyers and those who paid their bills regularly, were accepting opportunities to save by the simpler program of the cooperative. They adjusted their price schedules in the hope that by so doing they would kill the movement.[7]

In many agricultural areas, cooperative competition is so well established and gross handling margins are so narrow that there is little or no reason to develop handling, processing, or storing facilities. In fact, in some areas there is need for the consolidation of existing cooperative undertakings to form efficient operating units. Improved transportation and communication facilities favor larger facilities.

When such a stage is reached and when maintaining a narrow net handling margin is a major economic objective, the membership problems of a cooperative usually increase because there is a tendency for the tangible benefits attained for members to disappear as they come to benefit all producers in the area.

The benefits of cooperative marketing tend to disappear in four ways:

1. Competitive operating margins tend to become narrower as competitors struggle to hold business by paying higher prices. The result is that the usual measuring stick of cooperative advantage changes, which suggests that the need for cooperation has passed because competitors now pay about as much as the cooperative.

2. Improved returns lead to increasing supplies and hence to lower prices. New supplies come either by increased production or by attracting the product from other uses - as the shifting of certain grapes between table, dried, or wine uses.

3. Average costs of production (and marginal costs) tend to rise as production is increased in response to improved returns because

[6]See: Erdman, H. E. Some economic fundamentals of cooperation. Amer. Coop., 1925, vol. 1, pp. 69-77.

[7]See: Reynolds, Q. Cooperative buying of farm supplies. Jour. Farm Econ., vol. 17, No. 1, p. 159. February 1935.

> farmers use less advantageous resources or old resources more intensively, or because inexperienced farmers enter the industry.
>
> 4. Increased returns are capitalized into land values as farms change hands in the course of a generation. Thus, the newcomers and the second-generation farmers find themselves in possession of high-priced lands on which returns are low and taxes high.[8]

The younger members who did not experience the situation which led the pioneers to form the association are inclined to look upon it as just another dealer. This is particularly true if the new members have been required to assume little or no financial responsibility in the cooperative.

REASONABLE HANDLING MARGINS

NECESSARY TO ENABLE COOPERATIVES TO ATTAIN OBJECTIVES

In many cases cooperatives strive to maintain adequate handling margins so they can carry out one or more of their objectives. The stated objective of many cooperative undertakings is to improve the service rendered patrons. Another is to maintain dependable outlets for products or dependable sources of supplies. A third is to furnish supplies of improved and dependable quality. Knapp and Lister point out:

> Cooperative purchasing associations endeavor to provide a type of service especially adapted to farmers' needs. The customary retail and wholesale agency is concerned foremost with making a profit and any service which does not tend to develop a more or less immediate profit is likely to be neglected. On the other hand, the aim of the farmers' cooperative purchasing associations, while concerned with saving as much as possible for patrons, is to give detailed attention to the provision of supplies and services which will result in profitable farm operation.[9]

Improved service takes such forms as more frequent or regular delivery of supplies, or picking up of products, than is available from noncooperative sources. It may mean the proration of deliveries when movement of a crop or product in a given area is heavy. This eliminates waiting in line for long periods to make delivery. Improved services may also mean a better job of processing, pest control, or irrigation. Cooperative cotton ginning is a good example of improved service. Proprietary gins are primarily interested in ginning as large a volume as possible in a given period and frequently lower the value of the cotton compared with cotton ginned more slowly.

Dependable outlets adequate to handle a substantial volume during peak seasons are of utmost importance to the producers of perishable products.

[8]Erdman, H. E. Possibilities and limitations of cooperative marketing. Calif. Agr. Expt. Sta. Cir. 298, 19 pp., 1942. See p. 18.

[9]Knapp, J. G. and Lister, J. H. Cooperative purchasing of farm supplies. Farm Credit Admin. Bul. 1, 92 pp., 1935. See p. 7.

Proprietary concerns frequently are not ready to receive products when an operating season begins. Sometimes they wait until a price has been established before beginning operations. The noncooperative producer often does not know where he will deliver his products and some products may spoil before he can make deliveries. On the other hand, a member of a cooperative knows where his products will be received and need not wait until a market price has been established. This certainty may be an important advantage to the grower particularly for those producing canning crops.

One reason farmers have formed cooperative purchasing associations is to assure themselves of a dependable source of farm supplies. They want stocks of these supplies when they need them rather than when there is a "sales drive" by dealers. As agricultural operations have become more and more mechanized, the dependability of a source of supplies has become more and more important. A tractor without gas or oil is useless. A box of fruit may be worth three or four dollars if a box is available, but worth nothing on the farm if a box is unobtainable.

Mutual irrigation or water companies have as their principal objective the establishment of dependable sources of supply and adequate distribution systems. By constructing reservoirs and drilling wells far beyond the resources of individual farmers, they are able to furnish water to all members at reasonable prices.

Improved farm supplies of dependable quality are of major importance to farmers. Frequently, it has been impossible to obtain high quality supplies except through cooperatives. Babcock states:

> The purpose of organizing the exchange was to make available certain qualities of farm supplies which were not available through established trade channels. The College of Agriculture of New York State had worked out the fact that if we were to grow clover and alfalfa successfully, we must have seed from the northwestern part of the country. The trade practice was and is now, to a large extent, to buy some northwestern seed, a great deal of imported seed, southern-grown clover and alfalfa seed, and blend them. Our farmers reached a point where they could stand such practice no longer, and so they willingly came in to the number of 36,000 and subscribed to a fund for buying alfalfa and clover seed from the areas from which they should have it.
>
> In New York, northern Pennsylvania, and New Jersey the farmers are large users of dairy feeds. They are large users of ready-mixed dairy feed. The trade practice of including in mixed dairy feed a large quantity of worthless material was on the increase. The farmers in these sections wanted to be sure to get dairy feed that did not contain worthless filler, so they raised this capital sum, that they might establish their own mill and mix dairy feed according to formulas supplied by the College of Agriculture, out of straight ingredients.[10]

[10] Babcock, H. E. Benefits and problems of cooperative supply buying. Amer. Coop., 1925, vol. 1, p. 635.

The purchase of fertilizers also illustrates the situation. Many fertilizers are manufactured containing fillers which have little or no utility. The farmer pays for useless materials and frequently thinks he is getting a bargain because the sack of fertilizer with a filler is priced lower than one without a filler. Cooperatives manufacture fertilizer and eliminate the fillers. This results in net savings to patrons.

Some cooperatives do not handle farm supplies on their own account but analyze, test, and appraise various makes or brands and advise their members of the findings.

ALLOCATING SUPPLIES AMONG MARKET AREAS TO OBTAIN GREATEST TOTAL RETURNS

Cooperatives which handle perishable or semiperishable commodities in large volume from a given producing area and sell them in many market areas aim to place the products among the various market areas so as to obtain the greatest total returns.

Figure 3 shows hypothetical volume-price schedules in four large markets for a perishable commodity. If a cooperative had control of the entire

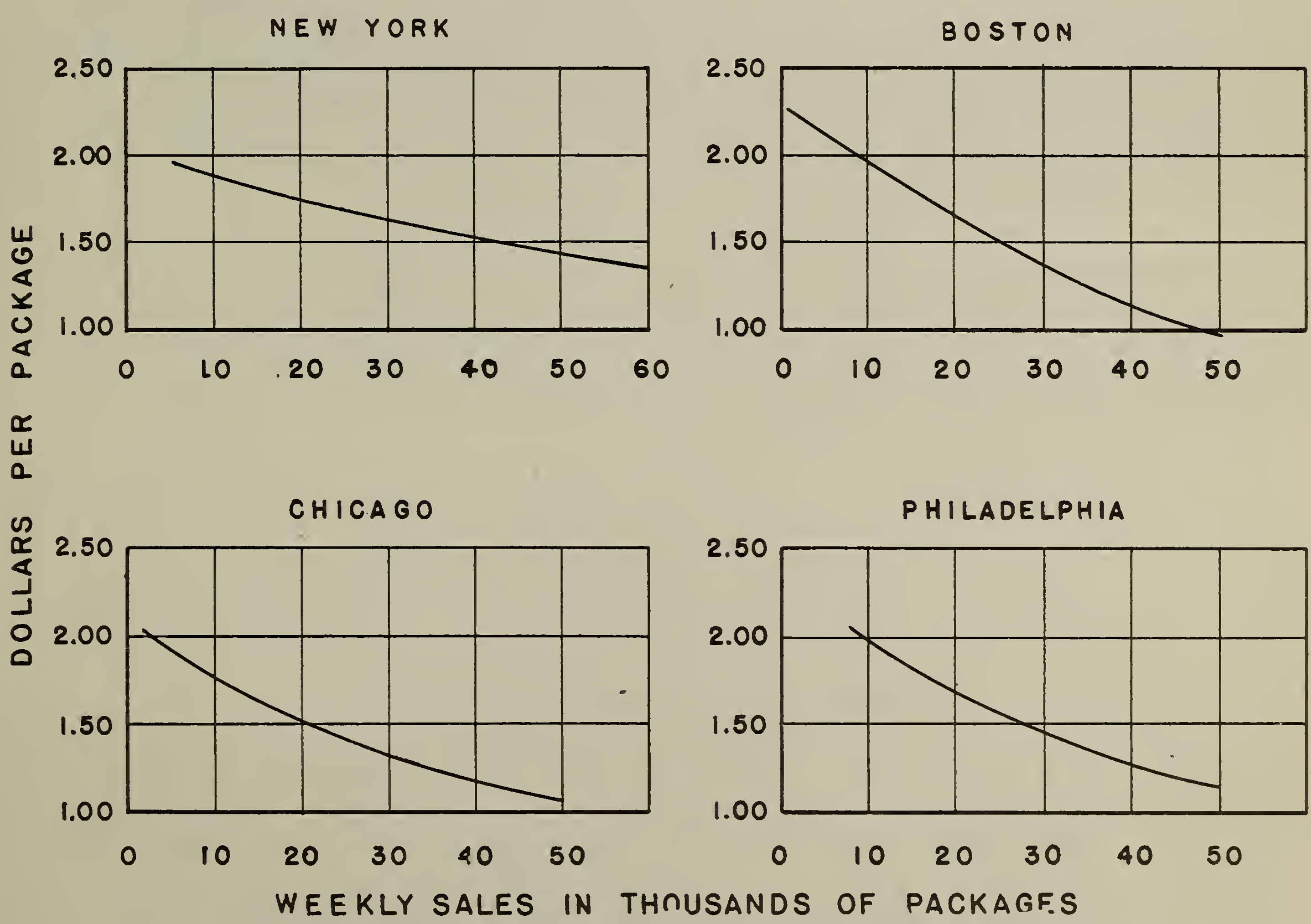

Figure 3. - Examples of volume-price relationships in four large markets for a perishable commodity.

output and the four markets were the only markets for the product, it would be a rather simple matter to calculate from the schedules the volume to be sold in each market to obtain the highest total returns.[11] Unless monopolized, the f.o.b. returns will be equalized.

Sales managers know the foregoing principle and refer to the volume-price schedules as "market capacity." They try to adjust shipments in such a way that available stocks will be reasonably spread over the numerous market areas "to get the most money."

The degree to which cooperatives are successful in properly allocating the supply depends upon how near the association comes to controlling the entire output. Lacking nearly complete control, the management must try to anticipate the actions of competitors and "outguess" them in the distribution of their stocks in order to obtain a higher average return than competitors. If the cooperative handles only a small portion of the total volume being marketed, it exerts little influence on distribution among market areas. The practice, then, is to attempt to develop a few market areas intensively, hoping competitors will do the same. However, this frequently results in a glut in one market area and a famine in another, because all competitors want to try various market areas at times.

Some attempts have been made among competitors to divide market areas by the formation of clearinghouse associations. A few have been highly successful. The legal status of such associations is doubtful, however, because the Anti-Trust Division of the Department of Justice looks with disfavor on any attempts of competitors to divide market areas, prorate stocks, fix prices, or exchange price information.

The distribution objective is of particular significance to the producers of highly perishable products, yet it is one commonly forgotten because the primary concern of most producers is the average return received by marketing through the cooperative compared with that received by marketing through other agencies.

With staple commodities, the distribution of available stocks among market areas is not as important as with perishable ones. However, the management of cooperatives handling staple products must be careful not to get stocks "out of position" in relation to desirable markets.

TIMING SALES TO OBTAIN HIGHEST RETURNS

Cooperatives which handle commodities that are harvested during a short period and sold over a long period have as one of their objectives the timing of sales to obtain the highest returns for the volume handled.

[11]For a discussion of the distribution among markets to obtain highest total returns see: Stokdyk, E. A. Marketing Tokay grapes. Calif. Agr. Expt. Sta. bul. 558, 74 pp., 1933, see pp. 26-33; also Waugh, F. V., Burtis, E. L., and Wolf, A. F. The controlled distribution of a crop among independent markets. Quarterly Jour. of Econ., November 1936.

If distinct periods of strong and weak demand exist, cooperatives can, if adequately financed, distribute their stocks to fit the circumstances and realize higher total returns than if the stocks were sold indiscriminately.

The principle involved in the timing of sales can be illustrated by figure 3. Assume that the schedules shown in figure 3 are quarterly sales periods instead of market areas. If actual data were available by sales periods, it would be possible to calculate the quantity to be sold in each sales period to obtain the highest total returns from the sales of a given volume.[12]

Reference has already been made to commodities which show a strong seasonal demand. Serious errors have been made by cooperatives handling some commodities in assuming seasonal changes in price when only erratic changes took place. Likewise, serious mistakes in sales policies have resulted from assuming no seasonal changes in demand when marked seasonal changes existed. Daggett points out:

> First of all, let me say that our experience has shown that there is no simple rule of the market that the cooperative wheat pool manager could rely upon to get higher than the seasonal average price. There is a seasonal rise in price that offers an opportunity of getting better than the average price for your members, but our studies show that this seasonal rise is only about enough to cover storage costs. So, unless the costs of storage of wheat organizations were lower than the average, the seasonal rise would not offer an opportunity for profit.[13]

Errors have also been made by holding stocks from one season to another in the expectation of higher prices. The objective of timing sales to obtain highest returns and the objective of distributing stocks among market areas to obtain greatest total returns are frequently called "orderly marketing."[14] Properly understood, they are important objectives for many cooperatives; yet improperly understood, and with action based on inadequate information or misunderstanding, they become dangerous.

INCREASING DEMAND
THROUGH SALES PROMOTION AND ADVERTISING

Cooperatives handling a large portion of the volume produced in a given area usually have as one of their economic objectives an increase in demand. This is particularly true of those cooperatives dealing in specialty crops such as avocados, citrus, cranberries, dried fruits, or nuts.

[12]See: Thompson, J. M. Some theoretical aspects of controlled marketing. Jour. Farm Econ., vol. 20, No. 2, pp. 495-503. May 1938.

[13]See: Daggett, E. How to analyze the wheat market. Amer. Coop., 1927, vol. 1, p. 346.

[14]Knapp, J. G. The hard winter wheat pools. University of Chicago Press, Chicago, 180 pp., 1933. See pp. 133-138.

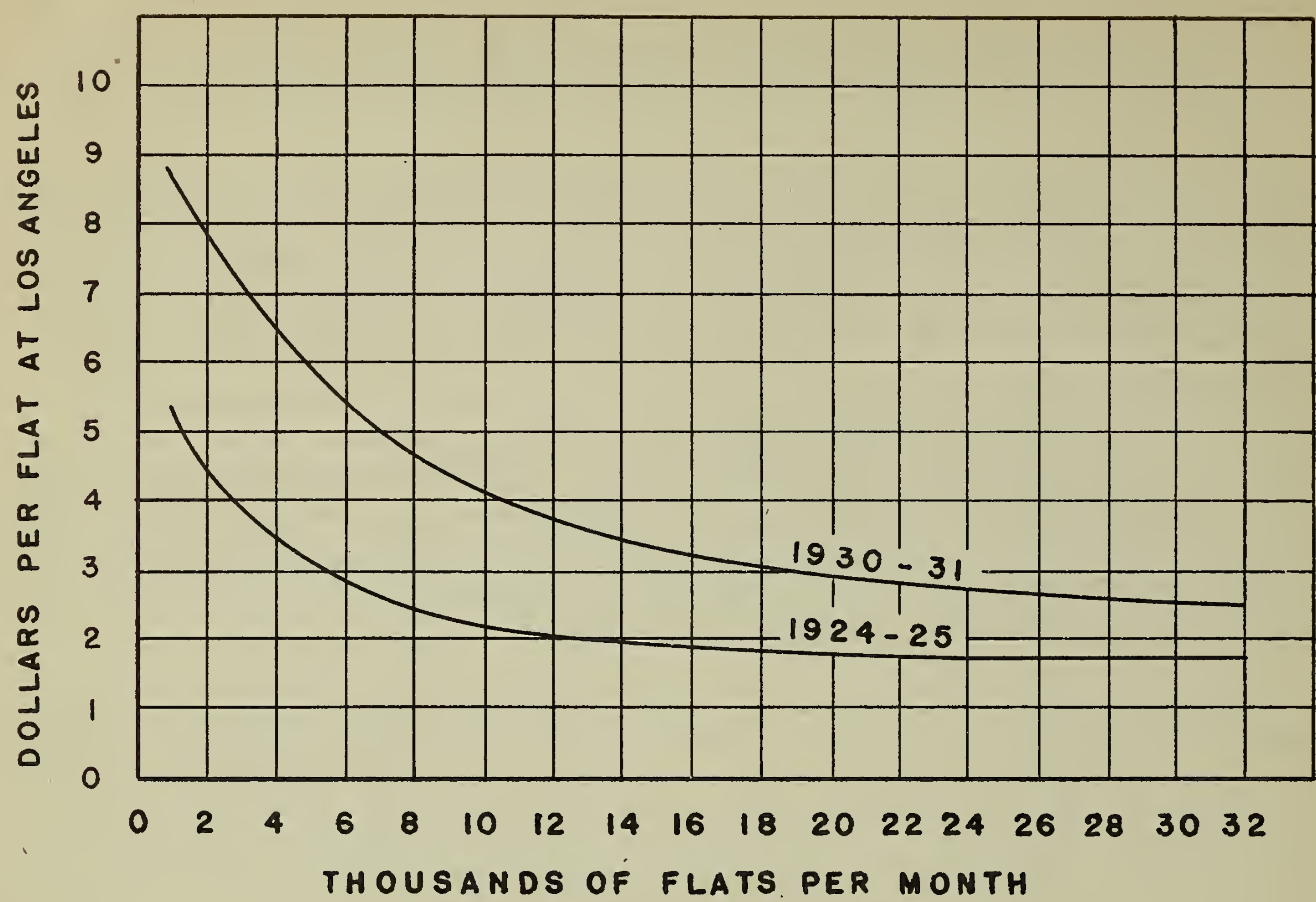

Figure 4. - An example of the effect of increased demand on the volume-price relationship.

The result of an advertising program is illustrated in figure 4 which shows two volume-price curves - one for the period 1924-25 and the other for 1930-31. Between the two periods there was an increase in demand. Many persons confuse an increase in demand with an increase in consumption. "Increased demand" means that in a given period compared with an earlier one the same quantity will be purchased at higher prices or larger quantities will be purchased at the same price.

During the last two decades the production of several specialty crops such as those mentioned above has increased enormously. Had cooperatives not been able to increase the demand, prices would have dropped to extremely low levels and many producers would have become bankrupt. Nevertheless, it is sometimes difficult to demonstrate to producers that the demand for their products has increased because with a marked increase in production, unit prices are generally lower than when production was much less. Furthermore, so many factors operate to influence buyers and sellers in their trading and the resultant prices that it is difficult to name any one factor, such as industry advertising or sales promotion, as the cause of an increase in demand.[15]

[15] See: Wolf, A. F. Measuring the effect of agricultural advertising. Jour. Farm Econ., vol. 26, No. 2, pp. 327-347, May 1944.

Commodities which can be so handled that they can be branded and the branded product carried through to the consumer lend themselves more effectively to advertising by farmers' cooperatives than those which cannot be so handled. As a result, few cooperatives handling staple commodities have attempted to advertise them - primarily because the benefits, if any, would go to the entire industry as well as to the members of the cooperative.

"How much can a cooperative afford to expend in advertising?" is a question which immediately comes to the fore if and when advertising is undertaken. The limitation is usually set by the additional return the association can obtain for its advertised products compared with the return competitors obtain on unadvertised products. Expenditures are usually short of this limit, however, because members expect the association to return to them as much or more per unit of product than competitors.

Most advertising done by cooperatives is brand advertising, and the advertising is done in areas where the products can be made readily available. This is in contrast to the entire industry advertising over wide areas. The cooperatives' philosophy is that if brand advertising assists the entire industry, well and good; but its responsibility is first to its members who are furnishing the funds.

INCREASING TOTAL RETURNS BY LIMITING SALES

With some commodities it is possible at times to increase the total returns to producers by limiting the total quantity offered for sale. This is true of those commodities the demand for which is inelastic.[16]

Figure 5 shows two demand schedules - the curve in section A from the middle point on illustrating inelastic demand and the curve in section B, elastic demand. Calculations from the two curves of the total returns that might be obtained by selling various quantities will show a point of highest total returns at 150 units on the volume scale of the curve in section A but at the right-hand end of the curve in section B.[17]

Recognizing that the demand for some products is inelastic, some cooperatives have limited the quantities offered for sale in an attempt to increase total returns. Obviously, the cooperative must have control of all or nearly all of the supply of the commodity to attain this objective. Even then such a program is difficult to carry out because producers are loath to destroy products once they are produced or to allow them to remain unharvested. If a secondary or lower use can be made of

[16]Demand is said to be elastic if with a slight reduction in price new customers buy freely or old customers purchase larger quantities, while demand is said to be inelastic if reductions in price do not attract many new customers or induce old customers to purchase more. Stated in another way, demand is elastic if buyers spend a greater total amount for increased quantities, while demand is inelastic if buyers pay a smaller total amount for increased quantities.

[17]See: Braun, E. W. Price analysis as a guide in marketing control. Jour. Farm Econ., vol. 19, No. 3, pp. 691-699, August 1937.

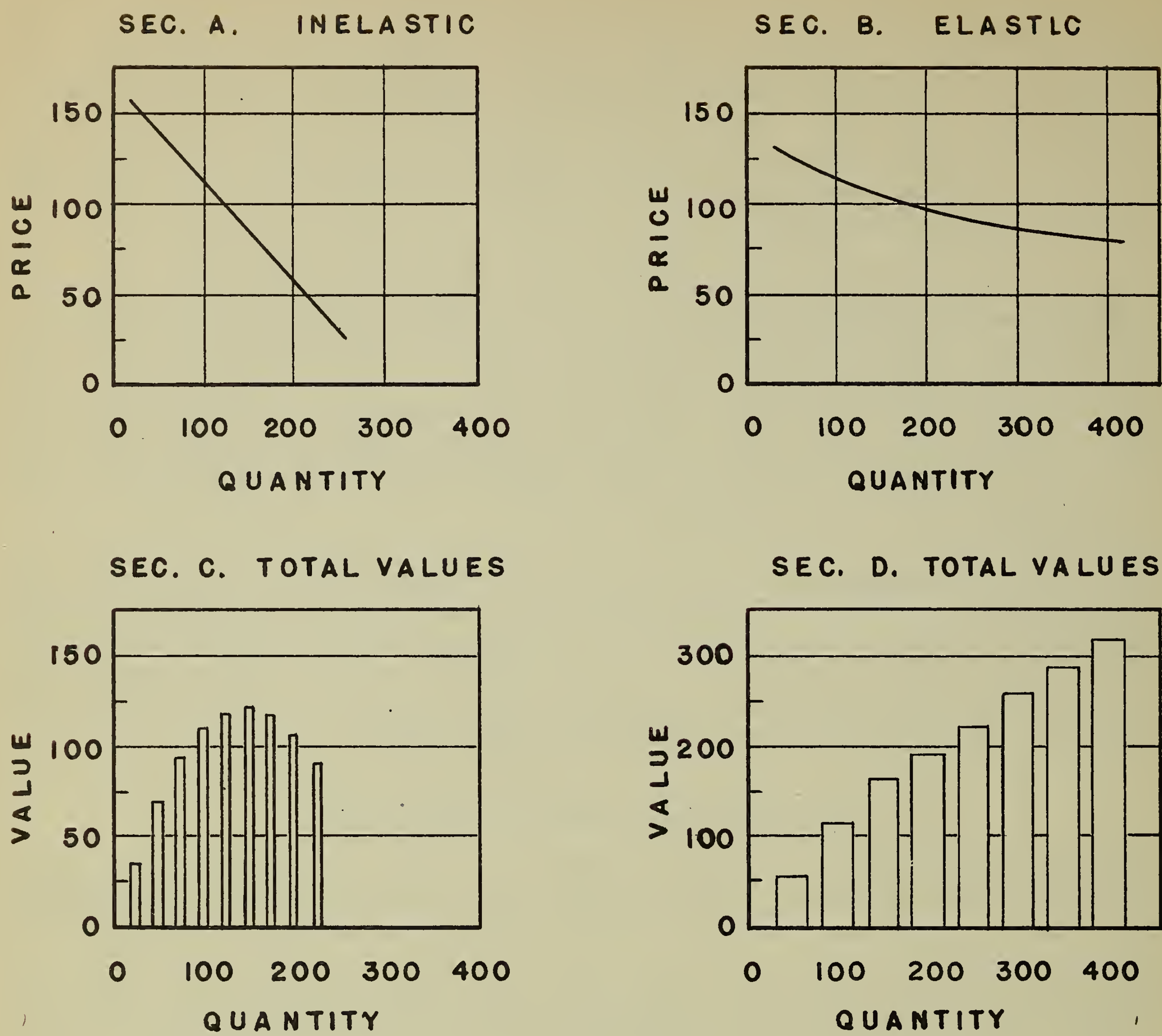

Figure 5. - Relation of quantity to value under conditions of inelastic and elastic demand.

the products, producers will support the objective. But even then, if a sizable proportion of the volume is sold by nonmembers who are not participating in the limitation program, the program is soon abandoned.[18]

The attempts of cooperatives to increase total returns by limiting supplies led to State and Federal legislation providing for limitation programs after due hearing, promulgation, and public participation. When a program is undertaken it is made mandatory upon all producers. It is not within the scope of this discussion to analyze the legislation or the programs undertaken. The reader is referred to several articles and publications for detailed information and appraisal.[19]

[18]Waugh, F. V. Market prorates and social welfare. Jour. Farm Econ., vol. 20, No. 2, pp. 403-416, May 1938.

[19]McKay, A. W. The citrus marketing agreements. Jour. Farm Econ. vol. 17, No. 2, pp. 340-348, May 1935. Wellman, H. R. Marketing agreements for vegetables and fruits other than citrus fruits. Jour. Farm Econ. vol. 17, pp. 349-356, May 1935. Lauterbach, A. H. Marketing agreements for dairy products. Jour. Farm Econ. vol. 17, No. 2, pp. 357-362, May 1935. Erdman, H. E. The California Agricultural Prorate Act. Jour. Farm Econ. vol. 16, No. 4. pp. 624-636, October 1934.

IMPROVING THE MARKET SETTING

One of the objectives of a number of cooperatives has been to improve the market setting.

The settlement with members on a quality and grade basis for their products instead of on an area average has been one of the improvements instigated by cooperatives. This has had far-reaching benefits for both producers and consumers, because it has induced greater care in production and handling and a generally higher quality.

The elimination of deliberate bruising and crippling of livestock on terminal stockyards has also resulted from the organization of cooperative livestock marketing agencies which operate on these markets.

The standardization of packages and grades, quotations, and terms of sale has also been accomplished in many situations where cooperatives took the lead.

The efforts of cooperatives to improve the market setting have often been met with stiff resistance on the part of competitors. The boycott of cooperatives on terminal livestock markets by certain dealers is one example.[20] The attempt of the Chicago Board of Trade to deny membership to cooperatives is another.[21]

Some cooperatives have reconstructed the market structure, as it were, by organizing auctions on which to sell their products instead of dealing with buyers individually. The objectives here were to facilitate trading and to obtain premiums for especially high quality products when the quality was not reflected in price differentials in private trading.[22]

IMPROVING PRICE REPORTS

Frequently, in some terminal markets, the prices reported for some commodities failed to reflect accurately the trading in them. Often the top price for a few sales was reported to attract shipments to the market. Trading was frequently conducted at, below, or above a posted quotation established by a few dealers. Cooperatives have, in many cases, corrected such situations by furnishing accurate information on actual sales.

[20]See: Nourse, E. G. and Knapp, J. G. The cooperative marketing of livestock. 486 pp. The Brookings Institution, Washington, D. C. 1931. See p. 319.

[21]Board of Trade of the City of Chicago v. Olsen (Ill. 1923) 262 U. S. 1, 67 L. Ed. 839, 43 S. Ct. 470.

[22]Benjamin, E. W. Price determination and methods of distribution. Amer. Coop., 1925, vol. 2, p. 380.

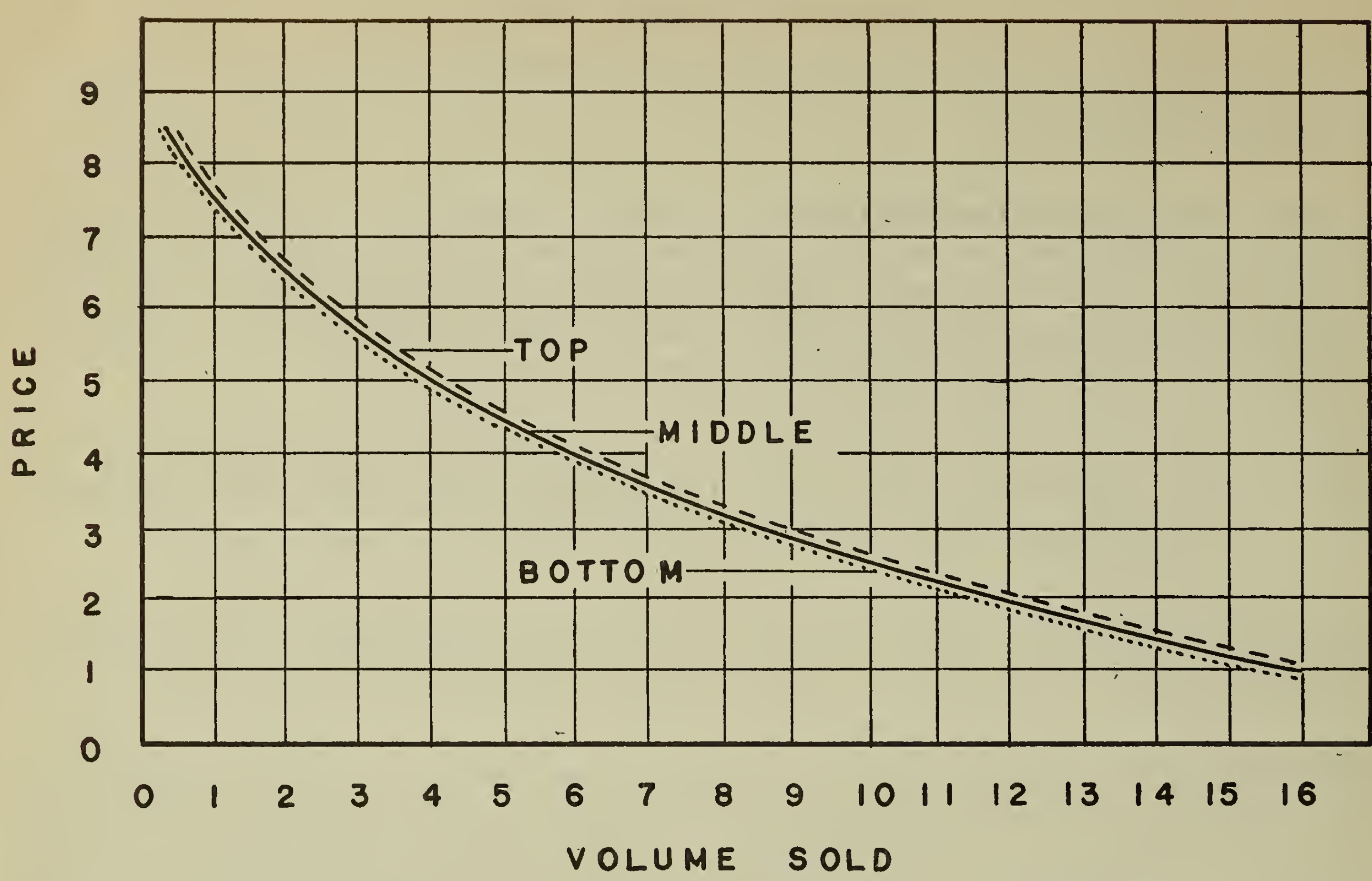

Figure 6. - An example of the bargaining range for a commodity.

INFLUENCING PRICES THROUGH BARGAINING POWER

Farmers with small quantities of produce to sell or who buy small quantities of farm supplies are basically weak bargainers. H. E. Erdman makes the following analysis:

> Individually the farmer is a notoriously weak bargainer because (1) he may not know in what grade his product falls; (2) he may not know the relative value of different grades; (3) he may not know what his local price should be even when central market prices are known, and frequently he cannot even interpret wholesale market quotations; (4) he cannot follow market conditions closely enough to know at any given time whether market tendencies are up or down; (5) he finds it difficult to judge a proposition put in a new way; and (6) his own supply is so small a part of the buyers' needs as scarcely to be missed if he refuses to sell.[23]

A realization of their weak bargaining position has induced numerous groups of farmers to form cooperatives in an effort to improve their bargaining position.

Some associations have as their sole objective bargaining for the sale of the products of their members. That is, they do not handle products, process, or store them, but only negotiate for a price with buyers.

[23] Erdman, H. E. Possibilities and limitations of cooperative marketing. Calif. Agr. Expt. Sta. cir. 298, 19 pp., 1942. See p. 11.

What is the theory involved and what are the possibilities and limitations of influencing prices through bargaining?

The price-volume curve in figure 1 is shown as a single curve. In figure 6 three price-volume curves are shown; the area between the top curve A and the bottom curve B is designated as the bargaining range. The theory of bargaining holds that on a given market with a given volume the price which may be established could be at the top, bottom, middle, or somewhere between the top and bottom of the range, depending upon the bargaining strength of buyers and sellers. For example, it is generally conceded by traders on livestock markets that a given volume of hogs of about the same quality on a given market on a certain day might sell for $12.00, $12.15, or $12.30 per 100 pounds, depending upon the bargaining ability of the buyers and sellers.

Bargaining is as ancient as trade itself. In Proverbs 20:14 we find the statement: "'It is naught, it is naught,' saith the buyer; but when he is gone his way, then he boasteth."

How is bargaining strength attained? What proportion of the volume must a seller control to bargain effectively? These are questions which immediately come to the fore when a cooperative has as one of its objectives the influencing of prices through bargaining.

From a seller's standpoint, it is desirable that he control a large enough portion of the volume to be sold so that buyers cannot obtain a sufficient quantity for their needs without dealing with him. From a buyer's standpoint, it is desirable that he have access to a volume sufficient for his needs without being dependent on the volume controlled by any one seller. The significance of the foregoing principles was well illustrated in the operations of one of the early tobacco cooperatives. For 3 years they were unable to sell any of the stocks the association held at satisfactory prices because the tobacco manufacturing companies could obtain sufficient supplies without dealing with the cooperative. However, in the fourth year of operations the association controlled enough of the available stocks to make it necessary for the tobacco manufacturing companies to deal with the association. Then the cooperative liquidated its entire holdings.

An example of a seller in an extremely weak bargaining position is that of a livestock trader on the stockyards who handles only a small volume. Buyers sometimes "set him up." The procedure is as follows: Buyer A offers the trader a price below prevailing or the previous day's quotations. The trader refuses the offer. Buyer B then offers a still lower price than buyer A, and the trader again refuses. However, by the time buyer C arrives and offers a lower price than buyer B, the trader knows he has been "set up" and may in desperation sell to buyer C. None of the buyers needed the trader's volume; hence they were in a position to press their bargaining advantage.

The portion of the total volume of a given commodity under the control of a single seller necessary to bargain effectively depends upon a

number of circumstances. Estimates of the portion necessary range from 25 percent in some livestock markets to 90 percent in the case of some specialty crops.

According to Nourse and Knapp:

> It is the authors' belief that there is sound economic logic in the contention that a cooperative commission association which is entrusted with a quarter, a third, or a half of the hogs received at a given stockyards market may by virtue of its collective bargaining position, put up some effective resistance to efforts to depress prices artificially on that market.[24]

Woodman says:

> I have made the statement many times that if an efficient selling agency had control of 50 percent or better of the hogs that came on any one of the central markets, they could stabilize that market and prevent the violent fluctuations that occur from day to day and from week to week. I do not mean that they could fix the price of hogs, but they could stabilize the market. I have seen a 50 cent drop between 9 and 11 o'clock of the same day. If your cooperative organizations ever get to the point, which they should have done long ago, where they can work in absolute accord in all these markets, if they ever get to where they can unite a sufficiently large number of producers into one compact body so that they can regulate the flow of hogs to market and market them in an orderly manner under the control of some central agency, controlling the movement in all of these markets, then, and not until then, will you have something to say about the price of your pork products.[25]

There is a belief, however, that in some situations a single seller may control too large a portion of a given volume to bargain most effectively. A case in point is that of a certain cooperative association which suddenly acquired nearly complete control of the beans produced in a limited area. Buyers who have been accustomed to receiving numerous offers to sell from this area refused to buy when they received only one quotation from a single seller. It was not until the association made arrangements with other sellers to offer the association's stocks that trading started.

Aside from the control of volume, bargaining power is attained through knowledge of market facts, the ability to evaluate them, and the ability to convince others to make transactions. These are bargaining skills which are well recognized and highly paid.

Other factors aside from the control of an essential portion of the volume and bargaining skill lend strength or weakness to the bargaining

[24]Nourse, E. G., and Knapp, J. G. The cooperative marketing of livestock. The Brookings Institution, Washington, D. C. 1931, p. 257.

[25]Woodman, E. E. Some problems of the farmers' Union commission companies. Amer. Coop., 1926, vol. 1, p. 206.

position of buyers and sellers. Important among these is withholding power. On the seller's side, it is the power to keep his stocks off the market, and on the buyer's side it is the power to get along without stocks if sellers refuse to offer. The seller's withholding power is influenced by the financial pressure or lack of it exerted on him by his financial backers. The buyer's position is influenced by his inventories and his ability to finance them. When sellers are forced to liquidate their stocks if loans or taxes are due, they become weak bargainers. Buyers who are underfinanced and not in a position to accumulate inventories on price declines are weak bargainers when they must have stocks to supply current requirements.

In the exercise of bargaining power there is the danger of overestimating one's bargaining strength, particularly if the bargaining range for a given commodity in a given situation is wide. The result is that sellers' stocks accumulate only to be sold later for prices lower than could have been realized had not the attempt been made to overexert their bargaining strength. On the other hand, buyers may find they stayed out of the market too long in attempting to exercise their bargaining power and must pay higher prices than they anticipated to obtain sufficient stocks for their needs.

Frequently, a cooperative association finds it difficult to prove or disprove to its members that its bargaining has been effective in influencing prices. Furthermore, the results of effective bargaining by the cooperative are likely to accrue to members and nonmembers alike. Members usually assume that bargaining has been effective when the returns they receive for their products are satisfactory, while if the returns are unsatisfactory they assume that the association has not bargained effectively. The reverse may be the case. Yet the results would be difficult to prove or disprove.

When cooperatives apply their bargaining power too vigorously with the result that their stocks do not move while those of competitors do, then the association is said to be "holding the umbrella" for nonmembers. This has happened all too frequently in the history of cooperative marketing, because there is constant pressure on the management of cooperatives by the members to withhold stocks when prices are low and because there has been a lack of understanding of the limitations of bargaining power. Nevertheless, the objective of influencing prices through bargaining power is one of the legitimate and concrete objectives of many cooperative undertakings. Many farmers belong to cooperatives because they do not like to bargain and prefer to turn the job over to experienced bargainers. On the other hand, there are some farmers who do not belong to cooperatives for the reason that they like to bargain and feel they do not want to relinquish this function.

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